[All redactions are based on Exemption 5]

Update on the U.S.-China Climate Change Working Group Initiatives
December 3rd, 2013

In April, 2013, Secretary Kerry and Chinese Foreign Minister Yang launched a new U.S.-China Climate Change Working Group (CCWG). At the S&ED in July, 2013 the CCWG announced five new initiatives focused on the largest emitting sectors in both countries, including carbon capture, use, and storage (CCUS); energy efficiency; heavy duty and other vehicles; smart grids; and greenhouse gas monitoring. During Vice President Biden's visit, the heavy duty and other vehicles initiative received high-level attention, with the goal of gaining Chinese commitment to more aggressively implement more stringent fuel efficiency standards. Our most immediate goal is to complete draft implementation plans for all five initiatives. The U.S. has shared proposed implementation plans with the Chinese and an interagency delegation led by State DAS Dan Reifsnyder will be in Beijing holding meetings simultaneous to yours in order to come to agreement on these plans. Once the plans are in place, we will begin implementing the initiatives and will hold a CCWG intersessional meeting in Washington D.C. in early March to take stock of progress and agree on deliverables for the May/June, 2014 S&ED. Below are talking points and summaries of each of the initiatives.

Note: Funding for these initiatives ($8.7M for two years) has been approved by Congress. These funds will be transferred in the coming months from State to EPA, DOT, and DOE for initiative implementation. Across these efforts, we also hope to catalyze significant private sector action, which will be necessary for implementation of any large scale pilot projects. [redacted]

TALKING POINTS

- [redacted]

<u>Emissions reductions from heavy-duty and other vehicles (led by EPA and DOT)</u>

EPA and DOT will work with their Chinese counterparts to implement policies and programs to enhance heavy-duty vehicle efficiency standards; expeditiously implement low-sulfur fuel standards and vehicle emissions standards in China in order to reduce particulate matter and

black carbon; and promote more efficient freight transport, including through public-private partnerships.

Heavy-duty vehicles account for about half of China's total fuel use, so working towards robust fuel efficiency standards could have a significant impact on their emissions from transportation. Road transport accounts for approximately one quarter to one third of air pollution in Chinese cities. This is also a rapidly growing emissions source – China's heavy-duty vehicles are predicted to grow from 10 million today to 60 million by 2030. Heavy-duty vehicles account for 20 percent of U.S. transport emissions (about 6 percent of overall emissions) and are also currently the fastest growing source of emissions from transport in the U.S.

Collecting and managing greenhouse gas emissions data (led by EPA)

EPA will work with China to build capacity for collecting and managing GHG emissions data, building on extensive U.S. experience in this area. This includes (a) technical assistance for data reporting and data quality management, sharing and translating U.S. approaches, and (b) sharing experiences for integrated data management.

EPA has done some work with China on this issue over the past several years, and this new agreement has allowed for high-level endorsement and direct Chinese support for carrying out this cooperation. We see great potential for significantly scaling up these efforts under this initiative.

The U.S. has one of the best emissions measurement and reporting systems in the world, providing an important foundation for measuring progress of economy-wide emissions reductions. We will be sharing our experiences and our domestic emissions data management approach with China. This can help build their capacity for climate policy development and enhancing transparency and trust in the UNFCCC process.

Carbon capture, utilization, and storage (led by DOE)

The U.S. and China will work together to develop several large-scale, commercial CCUS projects in both countries, to help promote this important strategy for reducing emissions from coal power plants and to explore new opportunities for "utilization" of captured CO2.

The U.S. and China have extensive R&D cooperation on CCUS through the U.S.-China Clean Energy Research Center (CERC). A variety of key U.S. and Chinese universities, government agencies, research centers, and companies participate in this effort. This new initiative will take our cooperation on CCUS from the research stage to the deployment stage, an important step forward and a critical one for actually achieving emissions reductions.

The U.S. and China together consume over 40 percent of global coal. CCUS technologies are capable of reducing significant amounts of CO2 emissions (up to 90 percent), but are currently not widely available on a commercial scale. The U.S. and China can be powerful partners in creating markets for these technologies and identifying policies to support deployment.

Smart grids (led by DOE)

The U.S. and China will promote exchanges and cooperation on smart grid technologies and policy issues through workshops and dialogues, building on work through the U.S.-China Renewable Energy Partnership and new efforts like the Smart Grid Technical Exchange Program.

While the U.S. is doing a good amount of exploration on smart grids domestically, our smart grid cooperation with China has been fairly limited. We have had technical exchanges and trade missions supported by US TDA and our companies are quite interested in these issues, but government-to-government cooperation is ripe for scaling up. This new initiative will jumpstart cooperation between the U.S. and China on these important issues and help pave the way for concrete action, including through pilot projects that utilize U.S. technology.

The power sector accounts for 33 percent of U.S. emissions and 44 percent of Chinese emissions. In order to significantly reduce greenhouse gas emissions from the power sector and achieve deep economy-wide emissions reduction targets in coming decades, both countries need to implement three critical and closely related components: (1) modern, "smart" grid systems, (2) significantly scaling up deployment of renewables and clean energy, and (3) enhanced demand management through energy efficient buildings and industry.

Energy efficiency in buildings and industry (led by DOE and State)

The U.S. and China will work with the private sector and other stakeholders to reduce energy use in buildings and industry in each country, including through bolstering the ESCO financing model in both countries.

The U.S. and China work together on a variety of energy efficiency efforts, including research under the U.S.-China CERC and specific projects through the U.S.-China Energy Efficiency Action Plan. This new initiative will bring together our existing, diverse efforts, bring them into a dedicated, objective-driven work plan, and identify concrete policies and pilot projects that will help scale up energy efficiency in both countries.

Buildings contribute over 30 percent of U.S. and Chinese emissions, and industry consumes over 70% of energy in China. These sectors are critical for addressing our economy-wide emissions, and allow for taking advantage of very cost-effective options for saving energy. Currently, there are thousands of ESCOs in the U.S. and China, with different models of operation, but both countries can investigate new ESCO models to help scale up efficiency in sectors where ESCOs have previously been unable to break in. These efforts can help China meet their goal of reducing energy intensity by 16 percent by 2015 and the U.S. in meeting our goal of doubling energy productivity by 2030.